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ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By LOUIS BAUER, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

(Continued from page 360.)

IV.—*Deformities of the Spine; Treatment.*

GENTLEMEN:—In the treatment of posterior curvature, all the changes and fluctuations have taken place, to which the successive theories on the proximate cause of scrofulosis have given birth.

When the humoral pathology prevailed, it was held that in scrofulosis the blood was contaminated by a *peculiar dyscrasic agent*, whose elimination, through the secretory and excretory organs, was laid down as curative indication.

The solidarists contended that if the nutritive fluid of the body was thus contaminated, the morbid principle would inevitably be incorporated in the solid structures. In order to remove it, it had to be brought back to a fluid condition, taken up by the lymphatics, before its elimination could be effected. The theoretical school disputed in toto the existence of a *materia peccans*, and sought in the inefficient oxydation of protein the acting cause of scrofulosis. In fine, the professional mind has been tending toward a mere nutritive derangement as the pathological basis of the disease, and hence regimenal treatment has taken the lead.

The shifting of these hypotheses has been so gradual and imperceptible that we have scarcely noticed the transmutation from one extreme to

the other. When mercurials and antimonials were the anti-scrofulous panacea, the diet was low, animal food being highly objectionable. When the production of good protein was the object, iron, quinia, with the most liberal diet, was commended.

We hear now but little about theories—the term alone having outlived them. Empiricism has now its sway. The followers of Rademacher may just as well term scrofulosis a beef, air, and iron disease.

The barbarism of former periods is, however, still maintained in the local treatment, and moxa, issue, and the like derivatory remedies, are commonly resorted to. If the pretensions of legitimacy and orthodoxy were not made, we would pass in silence over a treatment which is in direct opposition to all pathology and reasoning. As it is, we deem it yet worth our while to subject it to a searching criticism. For the truth must be oft repeated until it has driven away ignorance. We have, of course, nothing to do with the individual representations of that treatment. For it is either rational or irrational, and must stand on its own merits. And no individual authority, of whatever magnitude, can make an absurdity reasonable.

The local treatment, which we are now about to analyze, could not have perpetuated its sway for so long a time, had the pathology of posterior curvature been thoroughly investigated, and the fact established that *a series of diverse pathological conditions underlies that complaint*.

Admitting, however, for argument's sake, the tubercular theory of causation, it must be patent to the crudest mind that issues, setons, moxæ, and the hot iron are inoperative appliances for the removal of tubercular matter. And if clinical facts were attained to substantiate their therapeutical efficacy, they would tend to prove the fallacy of the theory rather than its correct-

ness. Such facts do not, however, exist, except in imagination.

The advocates of this local treatment seem to repose but little confidence in those appliances, in general, in tuberculosis, not having attempted to put them in operation when lungs or other organs are invaded. Is not this inconsistency the strongest condemnation of their plan?

We are, however, informed that local derivation is less designed against tubercular deposits themselves than against the process that initiates them. The idea prevails, that some sort of inflammation precedes tubercular invasion, which might be mitigated, and its sequences prevented by timely establishing a more intense inflammation in proximate and less important structures. On the surface, such reasoning may seem plausible. Mature reflection will readily disclose the fallacy. In the first place, the very commencement of tuberculosis is but rarely observed, and, least of all, in bony structure. We obtain clinical cognizance mostly, then, of these so-called tubercular depositions when they are established and tend to their termination. Next, it is against all physiological law to derive from one structure to another by the same set of nerves and vessels. It would rather seem that the disease is directly stimulated by these so-called derivatory appliances.

Besides the unrefutable physiological objections to derivation, they are so severe as to gravely affect the constitution, creating irritative fever, disturbing rest and appetite, and causing drainage upon the system, which is already taxed beyond endurance. In fine, local appliances of this kind materially interfere with the supine posture, considered indispensable in incipient cases of posterior curvature.

Having, however, disputed in toto the existence of bone tubercle as the cause of kyphosis, and shown the real pathological condition of this complaint, the question of derivation presents itself in another shape, namely, *whether derivation can possibly benefit the actually existing morbid condition, of which posterior curvature is but a symptom?*

As yet, it has not occurred to any surgeon to interfere in the reparative process of fractures, and diastasis in other parts of the skeleton with derivatory measures; position and adaptation of the fragments being held sufficient.

What is needless elsewhere, is equally dispensable in relation to the spinal column.

The same argument is applicable to traumatic inflammation.

With the balance of causes, periostitis, ostitis, and chondritis, and their respective structural consequences, derivation seems more plausible, on account of their being of more chronic and protracted source. We should, however, bear in mind that we scarcely ever have an opportunity in attending recent cases, that most of them are advanced when they come under observation, and that it is simply impossible to re-establish the healthy structure by derivation! There may be caries or necrosis; a sequestrum may have formed with consecutive abscess; the intervertebral cartilages may have become already disintegrated, lost their elasticity, and drawn the adjacent vertebral bodies into destruction, and so forth. What, in the name of common sense, derivation can do in re-establishing the normal anatomical status, is certainly not to be conceived. The grossest ignorance in pathology alone can indulge in such fictions.

Since the theory of local derivation is untenable, and the practice of the same has given no satisfaction to either patient or surgeon, we feel it our duty to *advise its discontinuance as far as joint, bone, and diseases of the spine are concerned.*

There is still some difference of opinion with practitioners as regards the recumbent posture in the treatment of posterior curvature. Some surgeons hold that the horizontal posture, for therapeutical purposes, is not only dispensable, but directly prejudicial to the general health of the patient. The necessity of rest and the recumbent position in kyphosis follows from the morbid condition of the spine. *A softened and physically deranged spinal column is obviously unfit to support the superincumbent weight of the body, and the erect posture must necessarily tend to stimulate the disease, and to aggravate the existing deformity. No spinal supporter can be substituted for the horizontal posture, however ingeniously constructed.*

The prejudicial effects of the horizontal posture upon the constitution of the patient are more imaginary than real, and, at any rate, grossly overrated. Our clinical observations, on the contrary, have elicited very different results.

While the child is suffering from some spinal trouble, it pines away, becomes pale and sallow, loses flesh, and is every way declining. It neither has appetite nor good night's rest, being, at the

same time, peevish and irritable. Each day increases these general symptoms.

In placing your patients in the horizontal posture, and enforcing it rigidly, you will in a short time notice changes for the better. In a few weeks he will assume all the attributes of health and strength, and fatten up. This has invariably been our experience, *irrespective of the length of time we had kept the patient on his back*, unless abscess had formed that ran him down.

Pathology and clinical experience render, therefore, the horizontal position one of the most valuable and indispensable remedies, without which *we should peremptorily refuse to burden ourselves with the responsibilities in attending a case of kyphosis*. Horizontal posture is, in our humble opinion, as needful in the treatment of progressive posterior curvature as in fractures of the lower extremities, and for the very same reasons, whatever the retroflexion upon the general health of the patient might be.

Since the horizontal position is most effective when combined with immobility, that is to say, with rest of the spine, some precautions are to be observed in connection therewith. If the spine already protrudes, or is very tender on pressure, an ordinary bed does not answer, for the patient could not endure the pressure of an even and firm mattress for any length of time, whereas a feather bed would heat too much, and favor bad position. The best, under such circumstances, is a *water-bed*, which both yields to and supports all parts of the body, and exposes none in particular to exceptional pressure. Indeed, nothing can equal the excellence of a water-bed for this purpose, and it should be provided for the poorest of your patients.*

At the beginning, the patient is so much delighted with his new accommodation as to submit patiently to restraint, if, indeed, it could be thus termed. As the improvement advances, he may need shoulder-straps and a belt to constrain him in the recumbent posture, and they should be applied. This apparatus is to be fastened to the blanket with which you have to cover the water-bed, in order to obviate its heating effects.

With the water-bed moderate extension of the spine may be combined, both to correct as much as practicable the form of the spine, and to coun-

teract the reflected contraction of the dorsal muscles. The plan for extension is the same as with other parts of the skeleton. Stout adhesive strips are fastened from the hips downward along the lower extremities to pulley and weight at the foot of the bed. Other strips are applied to either side of the spine above the affected spot, and in a similar manner carried to the head of the bed. Such an extension acts directly upon the affected parts; its degrees can be modified, and we have found it a grateful auxiliary in the treatment of *incipient kyphosis*. The old mode of extension between the neck and pelvis has not been found effective.

If the spine is *tender and hot*, the respiration impeded and hurried, the circular pain of the body severe, and the patient feverish, we resort to *repeated* application of leeches, inunction with mercurial ointment, to *persistent* use of cold temperature, besides the appropriate constitutional treatment. From leeches we have derived great benefit in these cases, and they are indeed invaluable aids. We mostly have but a few applied at a time, and repeat them as often as the case may demand. A moderate depletion is scarcely felt by the patient, and their repetition is better calculated to relieve the hyperemia of the affected structures than a depletion on a larger scale. The latter may, however, be needed in *very recent and severe injuries* of the spine, causing violent inflammation, and when the patient is robust and strong. Artificial leeches may be substituted for the natural ones with the same result.

Cold temperature is a most valuable auxiliary, and its systematic use has been justly placed in high relief by Professor Esmarch, of Kiel. While it is being applied, the patient should lie on the face upon a water-bed, the spine be protected with a piece of thin flannel, and the ice-bag suspended so as to guard against escape of water, and be always properly filled.

The prone position of the patient being rather inconvenient, and interfering with extension, we resort to ice applications, only in severe and very active cases. In such, however, we persist in its use until the alleviation of the active symptoms is accomplished, and in those cases it constitutes a most valuable and indispensable remedy.

Rest, supine posture, extension, and local antiphlogosis comprise, then, the treatment of *incipient cases of posterior curvature*, and their judicious application affords all desirable relief to the patient. They almost arrest the disease,

* Messrs. Wade and Ford, of New York, have been induced by the author to keep water-beds of all sizes on hand, which are, of course, cheaper than the ordinary-sized ones.

and consequently put a stop to the growing deformity. From time to time repeated and careful inspections should be instituted to ascertain the progress or regress of the disease, and all symptoms should have been silenced for some time, before the treatment is changed. It may not be safe to alter the position in six or twelve months. In children of that age, time is of little, but health and form of great, importance. As a general thing, gentlemen, the patients do not only not suffer from the confinement, but, on the contrary, bear it exceedingly well. If you should find, however, that your patient does not progress as well as might be expected, that he becomes pale and attenuated, which cannot be accounted for by the advance of the local trouble, and even without this change, it may be advisable to allow passive open air exercises. In order to accomplish this without detriment to the spine, we have constructed and frequently employed a *dorsal cuirass*, fitting accurately to the posterior half of the trunk, and thus supporting the spine and body so perfectly that its form is thereby maintained without the possibility of an alteration,

Fig. 58.

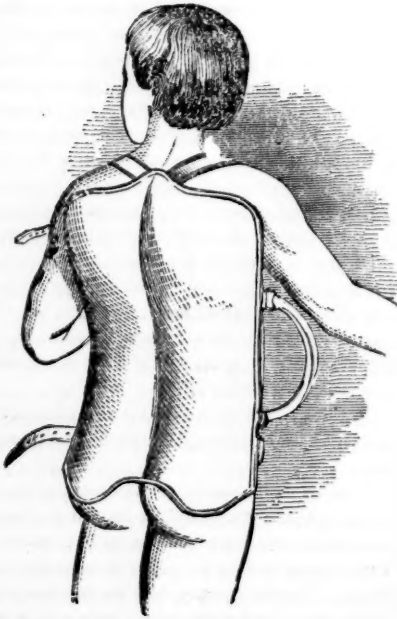
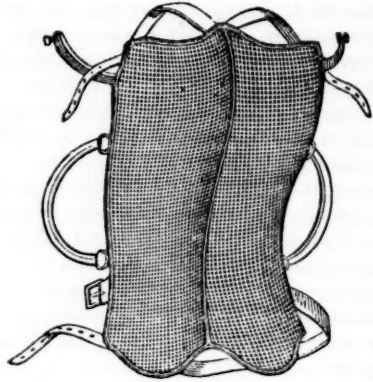


Fig. 58. The making of the cuirass requires a well-taken cast of the body in plaster of Paris.

The cast serves as a last upon which the apparatus is framed.

The cuirass consists, you perceive, Fig. 59, of

Fig. 59.



a frame, made of soft iron, with a piece along the spine. The intermediate space is filled with galvanized wire-webbing, soldered to the frame. If well adjusted, the apparatus should fit to the cast like a shell, or like the gum-plate of artificial teeth. The frame is then well padded, and covered and fixed to the body by a belt and two shoulder-straps. At the side of the instrument there are two leather handles affixed, by means of which you can lift and carry the patient in a horizontal position.

Being securely placed in this apparatus, the patient may be drawn in a little wagon, or may enjoy the open air in a carriage drive. Thus the tediousness of the confinement is agreeably interrupted, the general health is properly cared for, and one of the objections to the imposed restraint overcome.

If the improvement of the patient proceeds satisfactorily; if you find that his general appearance becomes stronger and healthier; if he fattens up, exhibits good appetite and rest; if there remains no soreness at the spine; in fine, if all the symptoms of his local disease have vanished for some time, then, and not before, you may allow the patient to creep on knees or elbows, and take thus some active exercise alternately with rest. With the return of new pain and febrile excitement, the recumbent posture should be resumed, so as not to risk a relapse of already subdued troubles. But if, on the contrary, the patient continues to do well by this treatment, you may supply him with

a supporter, and permit the erect posture. For a long time you have still to watch the effects of erect locomotion upon the spine and the constitution, and take prompt measures if new inflammatory symptoms should manifest themselves. The patient should, moreover, be advised not to indulge in violent exercises, even for years to come; for we have observed relapses from such causes in perfectly relieved cases as late as five years. In one of them, terminating fatally, two osteophytes had been fractured which had held the vertebræ together.

About the necessity and usefulness of mechanical appliances to the curved spine, there is yet some diversity of opinion among surgeons; in former times their efficacy was greatly overrated. Spinal supporters and stays were deemed sovereign remedies for kyphosis, and have commonly been resorted to. Pathological investigation and experience has, however, dispelled that error. The *very best* mechanical contrivance is nothing more than "a monitor" to the patient, *restraining undue motion* of the spine, and *slightly sustaining the superincumbent weight of the body*. Stays are silly and reprehensible apparatus! They are not substantial enough to support the spine, but they are calculated to press upon the vital organs, and interfere with their important functions. Competent surgeons do not employ or recommend stays.

There are quite a number of spinal braces in vogue, among which you may choose. You should, however, insist upon their accurate fit and efficiency. The former can be procured only by a cast of the body of your patient in plaster of Paris, upon which the apparatus is fitted and framed.

The efficiency of spinal supporters rests chiefly with the construction of the belt, which should be wide, and so accurately surround the pelvis that it will not slip, and serve as a reliable foundation for crutches and the spinal brace. Most apparatus are faulty in that particular, and then utterly useless. The crutches are designed to lift the shoulders and carry their weight to the belt, without compromising the spine. The spinal brace is calculated to constrain the spine from undue motion by means of a well-fitted and padded dorsal plate. Such an apparatus we beg now to exhibit, Fig. 60. You notice that the belt fits accurately and firmly to its cast, and yet is light, being made after the plan of the cuirass. It consists of four pieces, connected by

metal hinges which facilitate its application, without detriment to its solidity. The dorsal

Fig. 60.

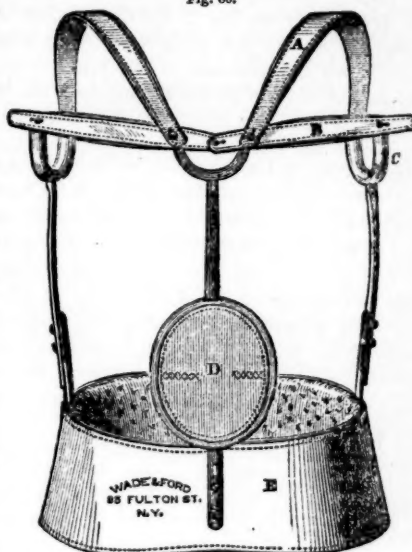


plate should be perforated, so as not to impede perspiration. The crutches are made of two pieces, in order to shorten or lengthen them. If the patient should grow, or his form be materially altered, the apparatus would lose its proper adaptation. In that case a new cast should be made of his body, and the apparatus altered accordingly.

We can, of course, give but general directions as to the construction of such an apparatus, and you are to modify the same according to the individuality of the case. Thus, it may be necessary to raise one shoulder higher than the other, and to extend the dorsal plate to one side, over the ribs, if the spine tends likewise toward a lateral excurvation, etc.

The treatment of incidental complication will now occupy our attention for a brief space of time:—

1. In the malformation of the thorax in kyphosis we recognize a compensating provision of nature, with which we have no pretense of interfering. The thorax widens in proportion to its loss of length. The change provides the necessary space for the lungs and heart, which dare not be interfered with by mechanical constraint.

2. The general attenuation of the body is

usually proportionate to the degree of deformity. The more we prevent the latter by proper treatment, the more we obviate or ameliorate the former. Inasmuch as the attenuation results from copious suppuration, we have to meet it by the most generous diet and tonics.

3. Paralysis and contractions yield mostly to a rigidly enforced horizontal position of the patient and local antiphlogosis.

4. In consecutive abscess (dorsal, lumbar, psoas, and iliac abscess) we advise to puncture them as often as they fill again, if they are circumscribed; but to lay them freely open and divide the fascia when they are diffused. By the former procedure you relieve the parts in a most direct way, and limit the additional suppuration of the fistulous tract; by the latter, you prevent the mischief of the matter burrowing below the fascia ad infinitum.

The suggestion of Nélaton, to close the fistulous tracts by injecting tincture of iodine, is neither plausible nor practicable, and our experience has been against it. You gain nothing by obliterating the tracts, should you ever be successful with the injection, since you cannot reach and exterminate the cause. And as long as the latter exists, the matter will force its way in the old or a new direction.

As a matter of course, gentlemen, we can lay down but general points for your guidance, and must leave the details of the treatment to your own acumen. If we have dwelled much on the pathology and the local treatment of posterior deformity, we have done so because they are not generally and thoroughly understood by the profession. If we have said but little about the constitutional treatment, we have reason to presume that you needed no suggestions on that score. In fact, lectures on a special subject are necessarily constrained to the specific features of the same, and have little to do with its generalities. At least, we conceive our subject in that light.

Since the delivery of these lectures, we have met with diverse clinical cases that, in the most direct manner, corroborate the views set forth in these pages with reference to the causation of kyphosis, and some of our esteemed colleagues have taken great pains in furnishing us still more cases of this class. Thus, our friend, Dr. John Cooper, of this city, introduced to our notice Lawrence Gordon, fifty years of age, a carman by occupation, with the following history: On the third of July, the patient drove his vehicle,

heavily laden with wood, on a sloping ground. The elevation was firm, the slope soft, and one of the wheels cut deeply into the soil. Gordon exerted all his strength to balance the vehicle, by pressing with both hands against the lower standing wheel. Nevertheless, the cart turned over to his side, first bending his body violently forward, and at last, when he had to give way, he was thrown on his back, with the load and the cart upon him. On being extricated, a fracture of his sternum was discovered, about an inch below the manubrium. The case was deemed a serious one, and therefore sent to one of our public hospitals. Besides the symptoms incidental to the before-named fracture, he experienced much pain in the lower part of his back; volition of lower extremity was moderately impeded, and he could not void his bladder, on account of which the catheter had to be employed from the very start, and during the succeeding ten days, when this symptom gradually subsided.

From the statement of the patient, it appears that the trouble in his back did not excite the apprehension of his surgeon, nor was it thought to be in any way connected with the retention of urine. At the end of a fortnight, the chest symptoms having subsided by that time, he was induced to rise but could not keep himself upon his legs. It was his impression that the attending surgeon doubted the reality of his inability to move; a carriage was ordered, and the patient sent home. He most positively assures us that, while in the hospital, his spine was never examined. *Relata refero!*

Being introduced to our Clinic on the 5th of September, the patient presented the following condition: good and powerful frame, but general attenuation, more marked, however, about the hips and in the lower extremities. His gait is peculiar to spinal affection, his spine being kept perfectly stiff; shoulder-blades retracted, and head slightly reclined. Walks with bent knees, (to obviate concussion of the spine.) No fever; appetite and rest good, although temporarily disturbed by circular pains around the waist, particularly after a day of exertion.

The sternum is firmly united, the lower fragment slightly overlapping the superior. There is no impediment in respiration.

The lower portion of the spine is very tender on pressure, but still more so on percussion. The twelfth thoracic, first, second, and third lumbar vertebrae protrude posteriorly, forming a gentle

curve, in which the second lumbar vertebra occupies the most prominent position. The superincumbent portion of the spine is antero-flexed. Locomotion is tolerably easy, though the patient has to move with bent knees, in order to obviate painful jarring of the spine. There is still some slight trouble in the evacuation of the urine, and the sexual functions have been entirely suspended.

The patient averred that up to date his spine had not been examined, and therefore learned for the first time that his spine had become deformed. How soon the deformity made its appearance after the accident, cannot be precisely ascertained. But, judging from the degree it had attained when examined on the 5th instant, but two months after the accident, it may be reasonably inferred that the deformity was the immediate result of the injury, and has ever since and steadily increased in consequence of the patient having walked in the erect posture.

There can be no reasonable doubt that the accident caused a fracture of the second lumbar vertebra. We infer this from the position in which the patient resisted the upsetting of the cart, and which concentrated both his exertion and the weight of the loaded cart upon the thoraco-lumbar portion of the spine, unduly flexing the same, and from the early appearance of its deformity. Most probably a wedge-formed fragment has been chipped off the body of the second lumbar vertebra right in front. A mere contusion or sprain of the spine, or laceration of ligaments and muscles, could not have given rise to so early a curvature. Dislocation of the lumbar vertebra without fracture or diastasis is impossible. The seat of the fracture and its limited extent render the non-interference with the spinal cord compatible.

The permanent suspension of the sexual functions is easily accounted for by the seat of the fracture, and the descent of the spermatic plexus in front of the same; whereas the temporary impediment in the voiding of urine must be traced to the incidental extravasation of blood sinking down in the cellular tissue toward the hypogastric and sacral plexus, from whence the bladder derives its nervous endowments. It is much to be regretted that the diagnosis was not made out at an earlier period, when rest and the recumbent posture for some months would have sufficed to obviate the deformity, and the inflammation that has ensued.

This case speaks volumes in regard to the causation of posterior curvature, and we hope its record will tend to weaken the confidence in its presumed pathology.

COMMUNICATIONS.

Electro-Therapeutics.

By H. LASSING, M.D.,
Of New York.

(Continued from page 431.)

Electro-Magnetism in Midwifery; Uterine Contractions; Anæsthetic; Difference in Machines; Relaxing Os; Retained Placenta; Uterine Hemorrhage; Puerperal Convulsions; Lobelia Inflata; Suspended Infantile Animation.

The use of electricity in parturition is not new, it has long been favorably known. I have used it with success to produce uterine contractions; as an anæsthetic; but particularly in overcoming puerperal convulsions, and to restore suspended animation in the new-born infant. I now employ this agent in preference to chloroform, ergot, opium, and other remedies whenever and wherever I can readily get an electro-magnetic machine.

I will but briefly describe my method of application. In every midwifery case where I am previously engaged, I commence, as nearly as it can be guessed at, about ten days previous to the expected confinement, by applying the positive pole of the to-and-fro current of Smith's machine along the spine, downward, while the patient holds the negative pole in her hand for about ten minutes each day, with a very mild power. When labor begins, after taking the usual measures to insure all proper excretions, I apply the positive pole of the to-and-fro current over the second and third lumbar vertebræ, and the negative pole over the lower part of the abdomen, the thighs, and pubes to produce contractions, if the os is properly dilated; if not, I reverse these poles, applying them in the same manner, which produces a speedy relaxation. During the intervals of the contractions, I apply, instead of the to-and-fro current, the same poles of the direct magnetic current in the same manner. I have only to say that I have always found that, when applied this way, the to-and-fro current, while producing contractions, be-

numbs the parts, and makes the pains comparatively slight; the direct magnetic current causing a soothing, refreshing sensation, giving the patient ample rest between her pains. It is but proper to add here, in order that none may be disappointed, that no other current or combination of currents will produce this effect, and that I have never seen any such current, excepting on Smith's machines.

The same method is pursued by me for retained placenta.

Where uterine hemorrhage has ensued, I have always succeeded, by producing uterine contractions with this agent, in the manner stated, in suppressing it.

In puerperal convulsions I apply the transverse current, being a combination of the direct and to-and-fro current; the positive pole to the nape of the neck, the negative along the spine and the course of the sciatic nerve to the soles of the feet, and have never failed, excepting in one case, where the convulsions had been produced by drinking a gill of raw brandy. There I was puzzled; electro-magnetism would not act as usual; I tried it in every way. Chloroform did no good; opium did not show any effect; other remedies were useless. I remembered having seen a Thompsonian use an enema of lobelia inflata with good results in a similar case, and I determined to give my patient the benefit of the chance. Accordingly, I prepared an enema of one pint of warm soapsuds, and two ounces of the powdered plant, (lobelia inflata,) which I injected per rectum, retaining it there by forcible pressure for ten minutes. Entire muscular relaxation was the result, copious diaphoresis and considerable nausea followed, the convulsions immediately ceased and never returned. The only difficulty afterward encountered was an obstinate constipation, no doubt produced by the enema, which, however, rapidly yielded to mercurial purges and injections of ox gall.

Having seen the treatment for puerperal convulsions much discussed lately, I have thus enlarged upon the subject, and have only to add that experience has convinced me that electro-magnetism in these cases will generally act quicker and more beneficially than the other remedies generally applied.

I employ it to restore animation in the newborn infant, by sending a mild to-and-fro current, from the funis above the ligature to the cardiac region, to the vertebral column and feet, and

through the intercostal and abdominal muscles to produce respiratory movements.

Thus, I have endeavored to make evident the utility of electro-magnetism in obstetric practice. Practitioners, no doubt, will find other uses and greater benefits from it, and may always be sure that if mildly applied and used with judgment and care, according to the dictates of a mind well disciplined in professional knowledge, in skillful hands it will never injure any, certainly be less risky than chloroform and ergot, and being pleasant in sensation withal, I would recommend it to the notice of my professional brethren.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. GIBBS, M.D.

OVARIAN TUMORS.

In the *REPORTER* for May 3d and 10th, we had an article upon *ovariotomy*, in which the propriety of operation, the manner of operating, the dangers to be apprehended, and the best means of obviating those dangers, were discussed. In the *Chicago Medical Examiner*, Professor Wm. H. Byford has an elaborate article upon ovarian tumors, running through six successive numbers of the *Examiner*, and concluding in the April number. Because of the importance of this subject, the able character and authoritative source of the paper, we shall try to give his views on treatment, even at the risk of fatiguing our readers with the subject.

Professor Byford has but little confidence in the *administration of remedies* for the relief or cure of ovarian tumors. We are certain we never saw any permanent effect from medicines over such tumors, and now we should only administer medicines in such cases with the view of improving the general health.

In regard to the propriety of surgical interference, the following two extracts will give the author's views:—

"I think it would be nearly, if not always, right to let all cases alone that did not threaten the life of the patient with material curtailment."
* * * "When, however, the disease is making obvious progress, and particularly when the ad-

vance is sufficiently rapid to leave but little doubt of its proving fatal within the average time of their duration, we are bound to make every effort within our power to save or prolong, as much as possible, the life of our patient."

In regard to *palliative* treatment, he thinks *mercury* and *iodine*, when long continued, always affect unfavorably the general health, without producing a corresponding benefit upon the tumor, and in this we perfectly agree with him. The mineral acids he regards as peculiarly adapted to these cases, and may be administered with the hope of relieving the distressing indigestion attendant upon great distention and imperfect performance of the renal functions. The chlorinated tincture of iron he regards as one of the very best tonics. A favorite prescription with us, where a tonic and diuretic are indicated, is the *muriated tincture of iron* in combination with *tincture of cantharides*, equal parts—dose, from twenty to forty drops, three or four times a day.

To promote sleep, he would postpone the use of opium as long as possible. Brandy, taken in sufficient doses, on an empty stomach, at bedtime, he says, will often prove quite efficacious in this regard.

"Chloroform, internally administered, is, I am confident, not sufficiently relied upon. Teaspoonful doses, given in milk, will seldom fail to induce a fine anodyne effect."

Tapping may be resorted to as a *palliative* measure, or it may constitute a part of the treatment designed to be *curative*.

"Pressure, in conjunction with tapping, is applicable, perhaps, to a larger number of cases than any of the other modes of treatment. It is very much more successful in cases of the monocystic than in any other variety. The application of pressure to a tapped sac has for its object a complete closure of the cavity of the cyst in such a manner as to bring its walls, as nearly as practicable, in contact throughout; this at once, if thoroughly effective, modifies the secerning capacity of its surface, and, perhaps, from the time of its application, arrests, more or less completely, the effusion of the fluid."

And, under favorable circumstances, the tumor may shrink, and nearly or entirely disappear.

"The manner of applying the pressure is of the greatest importance; the apparatus should be permanent, and exert as much force as the patient can bear without too great pain, fever, derangement of the abdominal viscera, or other indications of too acute a degree of inflammation in the cyst or damage to some organ."

After emptying the tumor, the exact locality and dimensions of the cyst should be ascertained,

and the compress should be accurately adapted to, and entirely cover it.

"The compress may be managed better by a belt of soft, but firm leather, to surround the body in such a place as to press over the centre of the compress. The power and direction of the pressure may be regulated thoroughly and at will, by subjecting it to a tourniquet-screw pressure from the belt. Of course, there must be thigh and shoulder-straps to the belt, in order to keep it from slipping up or down."

Another plan of obliterating the sac is by *injecting with iodine*, after tapping and drawing off its contents.

"I have used, on several occasions, six ounces of a mixture containing one scruple of iodine, two scruples of iod. of potass. to the ounce of water. This is certainly iodine enough, if specific in its influence, to cure any tumor. My plan is to allow it to remain in the sac, instead of removing any of it."

Of this plan, he says:—

"I believe it to be both more dangerous and less efficient than pressure after tapping." * *

"The last, and doubtless most effectual plan of obliterating the sac, is the establishment of a fistulous opening, communicating with the peritoneal cavity, or the external surface directly or indirectly, through the vagina or rectum. This plan is also the most dangerous plan, resulting in a large number fatally."

In regard to these various operations, Prof. Byford thinks that the cases, appropriate for each, should be judiciously selected. The treatment appropriate for one may not be for another, and each operation respectively may have its appropriate cases. The importance of judiciously selecting the operation for the case is thus urged:—

"No case, in which tapping, injections, or efficient pressure has been used ineffectually, is ever left in as good a condition for extirpation as before any such interference. Hence, I would not tap a tumor that ought to be extirpated, nor allow it to be injected or compressed."

The subject of extirpation is next considered. Upon this point, he says:—

"The only obstacle worth considering, if not the only one, to completion of the operation of ovariectomy, is the *adhesion of the tumor* to the abdominal walls or viscera so strongly and largely that it is impossible to separate them, and if separated, to *add very much to the dangers of inflammation*."

It may be observed here that Dr. I. Baker Brown believes, and in this, he says, he is borne out by the great experience of Dr. Clay, that adhesions form no objections to the comple-

tion of the operation. Yet he has been "led to the conclusion that all adhesions should be torn through and never cut."

Dr. Spencer Wells is of the same opinion upon both these points. They all believe that the changes occurring in the peritoneum, caused by long pressure, inflammation, etc., through which adhesions are accomplished, render that membrane less likely to take on destructive inflammation after an operation. Certain is it that the men above named are among the most successful operators; and statistics show that late operations, if not too late, in which the tumors were large and of long standing, in which cases adhesions are the most likely to occur, have been more successful than early operations upon small tumors.

Our readers will remember that, in our article, to which we have referred above, we expressed the opinion that, in a large majority of operations, sufficient caution was not observed and prevention adopted to obviate fatal complications or consequences of the operation. Upon this point, our author says:—

"I cannot help believing, or refraining from expressing the opinion, that very few operations of ovariectomy are performed in which there is not culpable neglect of the avoidance of some of the serious causes of disastrous consequences."

The sources of danger following this operation are fully discussed, and we should be glad to quote largely, but must forbear. The relative advantages of the ligature, the clamp, etc. are fully considered, also the dangers from hemorrhages, and how best to avoid them. This point we considered at some length in our former paper, to which, and to the paper now before us, we beg leave to refer. Prof. Byford says:—

"However securely the ligature may be applied apparently, there is no certainty that bleeding will not occur from the peduncle."

Our author gives his own plan of operating in minute detail. We can only find space for an extract or two:—

"The best time for operating is about the middle of the menstrual month of our patient, and if consistent with the circumstances of the case, the first of October and the first of June in this climate; but, of course, all will depend upon the urgency of the symptoms in the case, as to this last item of time. The patient should not be too much prepared, as it is easy to get up functional disturbance, and thus, with medicines, intended to place the patient in more favorable condition for operation, get the system in a state

the least calculated to resist the attack of traumatic disease. Above all, we ought not to disturb the abdominal organs with a cathartic, and if the stomach, liver, or other organs require a purgative, it should be given three or four days before the time to operate, and we should give them time to recover their tranquil tenor of function before we venture upon it. Should the bowels be constipated, we may give an enema six or eight hours before hand, but not oil or other cathartics. It is a good practice to give a pretty full dose of opium an hour before we put the patient upon the table. This is all the preparation she needs, provided she is in good condition of general health."

We would add one thing more, we would give brandy or whisky just before commencing to administer the chloroform. Our author gives full directions for all preparatory measures, so far as the surgeon himself or his requisite assistants are concerned. As to instruments, he says:—

"We want a good scalpel, blunt-pointed bistoury, large trocar, two large ligatures in needles, an *écraseur*, half a dozen silver pins, three inches long, with movable steel points to them, several large waxed ligatures, three or four small needles, armed with silver wire, a tenaculum, silk for artery ligatures, and it is well to have small artery forceps."

The operation is thus given:—

"With the scalpel, the operator should make an incision in the *linea alba*, midway between the umbilicus and symphysis pubis, *about two inches long*,* through the walls of the abdomen, down to the tumor; but he should avoid opening the cyst with the knife. It will require some care to avoid the cyst, particularly as the aponeurosis is thin at this place; the strokes should be light, and an examination for the peritoneum after each touch of the knife, soon as near the proper depth has been reached. When the sac is exposed, we should plunge the trocar into it and evacuate it, and, so far as possible, extract it through the wound. If the tumor is multilocular, this procedure will soon bring another cyst to the incision, when it should be punctured and evacuated, and thrown out through the wound, the next punctured, etc., until the whole is reduced sufficiently in size to be drawn entirely out. Should there be a solid portion at the base of the tumor, so large as not to come out of the wound easily, we may enlarge the latter sufficiently. All this being done, the tumor lying outside the abdomen; *the pedicle passing through the opening should be pierced on each side with one of the needles—with the large ligature—as near as possible to the tumor*. This is for the purpose of giving us perfect command of the stump after the tumor is separated. The chain of the *écraseur* should now be thrown around the peduncle at the base

* The italics in this extract are ours, and indicate the more important points in which operators differ.—O. C. G.

of the tumor, *leaving the stump as long as possible, and slowly crushed through it. We should next place the stump in the wound, leaving its edge a little above the level of the skin, and by means of the silver pins one inch apart, surround them with the thread, and secure perfect adaptation of the lips of the wound.*"

This last sentence is somewhat obscure, and we think does not fully convey the author's meaning. He evidently intended to say that the abdominal incision should be coaptated by means of the pins, and fastened by the thread in the usual manner of the twisted suture. He omits to state, what is of the first importance, that two of the pins should transfix the peduncle or stump, from which the tumor has been detached.

"The pins should be made to enter the skin about an inch from the edge of the incision on one side, dip down as near to the peritoneum without touching it as we can well effect, and piercing the opposite lip, come out about an inch beyond the other side of the wound. If the edges gape at all, some superficial stitches with the fine silver wire will close this more completely. A compress of wet linen should be placed over the wound, and all surrounded by the flannel roller, the patient removed and placed in bed, and allowed to come from under the effect of the chloroform. This operation is simple, easily performed, and I think inflicts as little dangerous violence, if not less than any other operation, the details of which are given. The extent of the wound is the least possible for the purposes of it, no handling or even rough contact of the viscera is required; the peritoneal cavity is exposed in the smallest extent, and for the shortest time; and all the objections and dangers urged against the ligature around the stump, or in the abdominal cavity, are obviated and avoided. The separation of the peduncle with the *écraseur*, and the placing the edge outside the wound, so that if hemorrhage does occur, it is outside, and is within the control as well as observation of the medical attendant, lessen, it seems to me, very materially the *causes* of inflammation at least; and as a logical, if not actual sequence, the dangers of the operation."

We are disposed to regard the *two-inch* incision as inconveniently small, especially in case of any considerable adhesions. From three to four inches conforms better with our idea of a well-performed operation. There is no necessity that blood, or any of the contents of the sac, should be allowed to escape into the cavity of the peritoneum. When we think of such escapings, and the mopping out with a rough sponge, the idea of murder will obtrude itself in spite of us. Our readers will remember that the dangers from hemorrhage, and the manner of securing

and dressing the stump, to prevent the escape of pus or blood into the peritoneal cavity, were strongly insisted upon in our former paper.

The balance of the paper before us is devoted to the management of cases in which extensive adhesions occur, and to the treatment after operations. Where there are any considerable adhesions, the incision will require to be lengthened to four inches, so as to admit the hand for examination, and for the purpose of breaking up the adhesions.

Peritoneal inflammation he regards as by far the most dangerous consequence of the operation. This is in accordance with the statistics of Dr. West; but when the operation is properly performed, we are disposed to question it. Keep blood, the contents of the sac, and pus from the suppurating stump, out of the peritoneal cavity, and we believe not one in a hundred will die from peritonitis resulting from the incision alone. Hemorrhage and shock to the nervous system are greater dangers we apprehend. Let any one carefully look over the recorded cases as we have done, and observe how soon after the operation the great majority of deaths take place, and we think he will agree with us that peritonitis is not the cause of death as often as is usually supposed—the death is too soon for that. In such cases as have come within our knowledge, the symptoms preceding death have not been those characteristic of inflammation, but rather of prostration or exhaustion, such as might result from free hemorrhage or nervous shock. Many cases called peritonitis, we have no doubt have been made such by a previous hemorrhage, which was fatal only in its secondary consequences—decomposition, etc. This subject is deserving of more attention than it has received.

EXTERNAL APPLICATION OF IODINE.

In the second part of the sixth lecture upon "New Remedies and their Therapeutical Applications," delivered by Professor Samuel R. Percy, at the New York Medical College and Charity Hospital, and published in the *American Medical Times* for March 1st, there are a few practical remarks upon the external use of iodine, deserving a place here. Professor Percy thinks that

"For ordinary application to adults, both the tincture and the compound tincture are too weak in iodine, and I am in the habit of preparing a compound tincture in preference to a simple tincture, as the iodide of potassium makes the

iodine more soluble, not only in the alcohol, but by the absorbents of the skin." * * * "The preparation I usually use is made by dissolving half an ounce of iodide of potassium, and an ounce and a half of iodine, in a pint of alcohol of about eighty-six per cent." * * * "If but one application of the iodine is needed, or if the application is made at long intervals, I usually apply over the spot painted by the tincture a good coating of iodinal collodion, made after the following formula: Take of iodine, two drachms; Canada balsam, one drachm; collodion, four ounces; dissolve first the iodine, then the Canada balsam in the collodion."

This is applied by means of a camel's-hair brush after the application of the tincture.

"By this the pores of the skin are not immediately closed, and the iodine exerts a more energetic effect, and the evaporation of the iodine is to some extent prevented by the outer covering of collodion. The balsam is added to prevent its cracking."

Ointments of iodine deteriorate very rapidly, and soon become inert; tinctures evaporate rapidly, and are not absorbed, unless some means are adopted to prevent evaporation. We think the plan adopted by Professor Percy is even more effectual than the one ordinarily practiced, that of covering with oiled silk.

INTERNAL USE OF IODINE.

In the lecture above referred to, Prof. Percy says: "Iodine, when taken *internally*, has, more than any other remedy, the power of counteracting the poison of scrofula." He divides scrofulous diseases into two classes—those that are idiopathic, and those that are hereditary, and says:—

"There is a marked difference in the features of the disease in these two instances; the former is nearly always associated with anæmia, and requires restoratives, as well as catalytic remedies; the latter is complicated with nervous derangements, and an enfeebled power of assimilation, which requires a combined treatment of stimulants or sedatives, with the catalytic. In the former cases, the iodine, in combination with iron, quinia, and cod-liver oil, is more efficacious; in the latter, the iodine, in combination with ammonia or potash, with the addition of strychnia, wine, hydrocyanic acid, or hyoscyamus, will be found more beneficial."

The scrofulous diseases of children are more readily benefited by iodine than similar diseases in adults. We beg leave to refer the reader to a paper of ours upon this point, published in the *American Medical Monthly* for January, 1856.

Of late we think we have found the *arsenite of potash* even more effectual than the *iodide of potash* in controlling scrofulous diseases, especially of children.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, AUGUST 16, 1862.

MARRIAGES OF CONSANGUINITY— THEIR EFFECT ON OFFSPRING.

Among the many causes which contribute to the perpetuation of hereditary diseases, and to the degeneracy of the human race, that mentioned at the head of this article, it seems to us, has not received the consideration its importance demands.

The common notion of hereditary infirmity is, that a specific form of disease is actually transmitted from parents to children through successive generations. Thus, the tuberculous, the cancerous, or scrofulous diathesis descends as an heirloom to the posterity of those afflicted with either, and can be as accurately traced in its genealogy as the regular succession of father and son, and such is really the fact. Within certain limits like produces like. Each individual of the species unites within himself qualities and features drawn from each parent. The characteristics of one may predominate over the other. Still, in the aggregate, the peculiarities of both parents will appear in the offspring, and not only disease or tendencies thereto, such as above mentioned, may be thus transmitted, but the peculiar idiosyncrasy of the parent may be represented in one child by insanity, in another by idiocy, in another by epilepsy, in another by some notable eccentricity, in another by moral vagaries or perverseness, or in another by an ill-balanced intellect. Thus Byron inherited from his parents the wild impulses, violent passions, and uncompromising selfishness which characterized his life. The morbid element in his nervous system showed its presence in the form of epilepsy, from which he suffered more or less until his death. Thus, also, Dr. Johnson was subject to a "vile melancholy which made him mad all his lifetime, or at least not sober." And instances illustrative of the same idea will occur to every one.

Now these peculiarities, so to designate them, are the result of some morbid action in the brain itself. In the healthy state, organic action pro-

ceeds with entire regularity and uniformity; and the results are also regular and uniform. If its processes are not interfered with, no imperfection in structure will be found in any organism, and its appropriate functions will always be correctly performed. But the least deviation from the standard of health will exhibit itself at once, and in greater or less degree in proportion to the extent of that deviation. Pure water cannot be drawn from an impure fountain. So neither can a sound organism proceed from unhealthy organic action. *Mens sana in corpore sano* is as true to-day as when uttered by the Latin philosopher centuries ago.

Nor does the deteriorating influence to which we have referred cease with the individual. It is transmitted to the offspring, and the tokens of its presence will be too obvious to be overlooked; in no instance more marked, perhaps, than in the intermarriage of blood relations. The results may not here be immediately seen. The consequences of the violation of this organic law of our nature may in a few instances be avoided by superior controlling influences, so that the offspring may exhibit little of the degeneracy which is sure ultimately to develop itself. But the chances of exemption are greatly lessened where the marriage of consanguinity is repeated in a succeeding generation. The manner in which the evil is effected, is by the influence which these unions exert upon the nervous system, producing, more or less directly, a debilitating and enervating effect upon the whole process of reproduction, and proving, as statistics fully show, a prolific source of deaf-mutism, blindness, idiocy and insanity. In the City of Dublin, Dr. Mulligan made observation in relation to 154 families, the heads of which were related in the degrees of first, second, and third cousins, as follows: In the whole number there were one hundred children who were deaf and dumb. In 34 families there were two in each; in 14, three in each; in three, four in each; in one family, six; and in another of thirteen children, seven of them were deaf and dumb.

Dr. Buxton, of Liverpool, makes the following statement in regard to 170 families where the parents were related as above: In 109 of them, each had one child deaf and dumb; in 38, two children; in 17, three; in three, four; in one, six; one, seven; and in another, eight—in all, two hundred and sixty-nine children who thus are made living sad monuments of a violated law of nature.

In France, M. Boudin finds that consanguineous marriages take place in the ratio of two per cent. of the population; and that of the issue of such marriages, the proportion of deaf and dumb children is 28 per cent. in Paris; 25 at Lyons, and 30 at Bordeaux. At Berlin, the same author only finds that the number of deaf and dumb children born of Christian parents is six per cent., while that of the children of Jewish parents is 27 per cent., a result which he attributes to the fact that Jews intermarry with blood relations, though strictly forbidden by the Jewish law, more frequently than Christians.

In New England, a distinguished gentleman ascertained that in seventeen families where the parents were blood relations, there were 95 children, 44 of whom were idiotic, 12 scrofulous and puny, and one deaf. In one of these families of eight children, five were idiotic.

Dr. Bemis, of Kentucky, reports, as the results of careful researches by reliable gentlemen throughout the United States, in the relationship above named, 763 families, in which were 3588 children, 2331 of which were defective in various particulars. Among 154 children where the parents were double cousins, 133 of them were defective.

And so we might continue to multiply statistics, all tending to elucidate the same general fact, but it is unnecessary. The fact is patent to every observing mind. The law is universal, and its violation will be as certainly followed by the penalty—degeneracy, disease—as effect will follow cause. Exceptions there may be, but they are not sufficiently numerous to disturb its general application. Education, circumstances, a full knowledge and persistent application of the necessary means and appliances to avert the dreaded catastrophe, may make here and there an exception to the rule, but they leave still no doubt as to the operating cause. In some States the evil is considered of sufficient importance to demand legislation against the intermarriage of cousins. Such laws are the outward expressions not only of the inward consciousness of every intelligent person, but also of the teachings of physiology, pathology, and the laws which govern the physical constitution of man.

We have purposely refrained from speaking of the moral aspect of the subject—that is the province of the theologian. But we may add, in conclusion, the voice of conscience, of humanity, and of a just regard for the welfare of our race, both in a moral and hygienic point of view,

should be heard in condemnation of a practice so detrimental to all these, and so exactly calculated to bring into the world a class of persons who are neither fitted to enjoy the blessings of life themselves nor yet permit their enjoyment by others.

EDITORIAL NOTES AND COMMENTS.

Scarcity of Vegetables in the Army.—We are sorry to have to record a scarcity of vegetables in the army. We fail to see the propriety of allowing our soldiers to perish from scurvy in a country filled with farms, from which some kinds of vegetables might be obtained. Surely some means might be found of supplying this prime want of our armies.

But it seems that, when supplies are sent, red tapeism steps in to prevent their being used. A newspaper correspondent at Fortress Monroe says:—

"I have learned that three schooners, laden with potatoes, have been at Harrison's Landing for some time, but, from some unaccountable reason, were not allowed to discharge their cargoes. The potatoes were spoiling, and they were compelled to throw them overboard. A captain of a transport ordered his men to pick some of them up, and out of seven barrels they were able to sort out five barrels of good, sound potatoes."

Surgeons for the Army.—There is an urgent call for surgeons and assistant surgeons in the regular United States service. About ninety of the former, and one hundred and twenty of the latter, are needed at once. This offers an excellent opportunity for intelligent and accomplished young men to obtain good positions. Applications should be addressed, in the handwriting of the applicant, to the Secretary of War, at Washington.

The Boston Medical and Surgical Journal.—With the issue for August 7th, our cotemporary, *The Boston Medical and Surgical Journal*, the only medical journal published in New England, begins its sixty-seventh semi-annual volume. The courage and perseverance of its indefatigable publisher, in maintaining the work for more than thirty-three years, is worthy of admiration and support. What changes have not been witnessed in medical periodical literature during the lifetime of the *Journal*! May it long live to be a beacon-light to the profession!

We observe that Dr. Oliver, who has for several years been one of the editors, retires from the position for private reasons, leaving Dr. S. L. Abbott sole editor. Dr. Abbott appeals to the profession of New England for a more hearty support in the way of contributions for the pages of the *Journal*. We trust he will not appeal in vain, but receive a hearty literary and pecuniary support, without which no journal can do justice to itself, or to the profession.

Dr. John Swinburne.—It will be remembered that Dr. Swinburne, of Albany, who had gone to the Peninsula on special service, was one of the surgeons who, in the retreat of our army from before Richmond, remained with our wounded. He was on duty—in charge, we believe, of the field hospital at Savage's Station. A great many of the wounded, who were captured by the insurgents, and who were exchanged or paroled, have been sent to the hospitals in this city. They uniformly speak of Dr. Swinburne, and of the other surgeons, in terms of the greatest admiration and respect for their noble and disinterested devotion to their welfare. In an especial manner they have commended Dr. Swinburne for his *conservative* surgery. One man exultingly showed us an arm, which he declared would soon be as good as ever, and said, "If it had not been for Dr. Swinburne, I would have lost that arm, and yet it has been saved in spite of Richmond prisons." Another told of the doctor's indignation when he found that a limb, on which he was going to perform the operation of resection to save it, had been amputated by a zealous subordinate, while he was attending to pressing duties elsewhere. It would be well for our soldiers if Dr. Swinburne's conservative ideas were more prevalent among our army surgeons.

Berkshire (Mass.) Medical Society.—This flourishing and high-toned Society had a pleasant and profitable reunion at Great Barrington, on the 30th ult. Pleasant and profitable in a social point of view, we mean; for the golden-headed cane seems to have been laid aside for the nonce, and the dignified medical fathers of the old Berkshire hills came down to the level of common men, and *discussed* "turkey, duck, beef, and ham" at the hospitable board of Dr. Clarkson T. Collins, who facetiously requested his guests to provide "the tongue." It need not be

wondered at, therefore, that the winding up of the meeting partook of a degree of sentimentality that was quite refreshing to those who were present. The "gray and reverend" head were there, toasts were drank and responded to, and a poem read by Hon. S. B. Sumner very appropriate to the occasion.

Such reunions are agreeable, and in some degree profitable. Let medical men frequently get together, even though their discussions are as unscientific as were those on this occasion.

CORRESPONDENCE.

Army Correspondence.

MEDICAL MATTERS ON THE PENINSULA.

In the *Boston Medical and Surgical Journal*, we find a communication from Dr. A. LeB. Monroe, dated Medway, Massachusetts, addressed to the surgeon-general of that State. Dr. Monroe says:—

"I reached home the 13th inst., after a short but active campaign of six or seven weeks with the army of the Potomac. Although sent by you upon an independent footing, I thought best to contract and put myself under the army regulations, securing thus a recognized official position, with specific duties and mutual obligations. I have had no cause to regret, but abundant reason to be satisfied with my decision.

"With seven other Massachusetts surgeons, I was detailed to the White House Hospital, where, for four weeks, I had an opportunity of observing the diseases of the army. It was a field hospital, consisting, when fully extended, of 170 hospital (wall) tents. The number of patients varied from 1200 to 1600. Diarrhoea was nearly universal, whatever else might be the matter. Rheumatism, or, to coin a word, rheumatoid affections, were the next most common complaint; next typhoid and intermittent fever, comparatively few cases of the latter assuming the regular forms of the disease. We found a great many patients who had suffered from over-dosing with quinine administered in whisky. We gave it, when necessary, in much smaller quantities, with benefit to the patient and saving to the government. I believe a vast amount of sulphate of quinine is worse than wasted by army surgeons. A common, and very acceptable form for its administration in the hospital, is as follows: R.—Quinæ sulph., ʒj; acid. sulph. aromat., fʒij; tinct. capsici vulg., fʒj; alcohol. dilut., (or whisky,) fʒj; aquæ puræ, q. s. ut fiat, fʒiv. Dose, one drachm, at short intervals, or pro re nata. While the sulphuric acid furnished a grateful adjuvant, the tincture of cayenne proved a valuable excitant, arousing the torpid and debilitated nervous power to the appropriation of the more permanent tonic virtue

of the sulphate of quinine. (*Mem.* I don't forget the absorption theory.)

"At the battle of Fair Oaks, five of the surgeons from the hospital were detailed for service, where we had an unlimited opportunity for practice in army surgery. There were not surgeons and instruments enough there to meet the demand for operations, and many of the wounded were sent in the cars to the Pamunkey and to Fortress Monroe, there to suffer capital operations at a late period, which proved nearly always fatal.

About ten days before I left the hospital, I was detailed to receive the sick coming from the army in the cars, sending those *really* sick to the hospital, and the malingerers back to their regiments; not a very pleasant, but yet a very important and responsible duty.

"On the 22d of June I was ordered to report to Gen. Heintzelman, at his headquarters, Savage Station. The medical director of his division, Dr. Milhau, (one of the really efficient and worthy medical officers of the army,) attached me to the Second Regiment New Hampshire Volunteers, Grover's Brigade, Hooker's Division, to fill the post of the assistant surgeon, absent on account of sickness. Thursday morning, June 25th, Dr. Milhau sent me to a depot for the wounded, as the first of the series of the six days' battles had begun. In these depots for the wounded, I spent the greater part of my time, night and day, until we arrived upon the banks of the James River, living during all this time, with the exception of four meals at a mess table, upon an insufficient supply of *hard* bread and a beverage called coffee, in which the principal ingredient was the sacred soil of Virginia, which latter also furnished my place of rest, when I had a chance for rest. At the battle of Nelson's Farm, we worked at the depot (which was a church with the pews removed) until 1½ o'clock A.M., July 1st, when we desisted from operations from sheer exhaustion, leaving several amputations to be performed in the morning by two surgeons, who volunteered to remain with the wounded. At 2 o'clock A.M., we mounted our horses and joined our retreating division. This day the battle of Malvern Hills was fought, when shot and shell, from gunboat, artillery, and infantry, reigned supreme, filling the air with discordant music, and the depots with wounded men. Wednesday, July 2d, we arrived at Harrison's Landing, marching all the forenoon in a drenching rain, without any breakfast. A week of excessive labor of brain and muscle, with a *very* limited supply of food, had done its work for me and others. Being unfit for duty, I went to the Hygeia Hospital, Fortress Monroe, when, at the end of a week, being no better, but rather worse, I came home, where I am slowly recovering my health and strength.

"In conclusion, I must say that I could not have timed my connection with the army more opportunely if I had foreseen what was to occur. An advance to Richmond, rather than a retreat, would have been far more agreeable and less exhausting, but no more instructive and profitable in a professional point of view.

NEWS AND MISCELLANY.

Sick and Wounded Soldiers.—By the annexed table it will be seen that our hospitals are nearly full. Eleven of the hospitals have a capacity of 4893 beds, and now accommodate 4115 patients, the greater part of whom have arrived from the Peninsula within the past two weeks:—

Hospitals.	Capacity.	Inmates.
West Philadelphia.....	2500	2053
Fourth and George Streets.....	201	201
St. Joseph's Hospital.....	150	78
Twenty-second and Wood Streets.....	230	175
Ninth and Christian Streets.....	200	240
Episcopal Hospital.....	250	221
Fifth Street.....	255	229
Twenty-fourth and South Streets.....	225	120
Seventh and Catharine Streets.....	65	54
Pennsylvania Hospital.....	100	88
	4237	3459
Chester.....	656	656
Total.....	4893	4115

There are five or six hospitals not included in the above list, which would add somewhat to the aggregate.

New Government Hospitals.—The Government Hospitals at the corner of Sixteenth and Filbert Streets, and at Hestonville, are nearly ready for occupancy. The former will accommodate 300 patients, and is under the charge of Dr. W. M. Breed. The latter is under the charge of Dr. D. Hayes Agnew, and will accommodate nearly 200 patients.

Personal.—Assistant Surgeon Willard A. Child, of the 4th Vermont, to be Surgeon of the 10th. His professional ability, as well as gallant and meritorious conduct during the recent trying times on the Peninsula, fully entitled him to this promotion.

Dr. J. H. Thompson, of Goshen, New York, has been appointed Surgeon of the 9th District Regiment of that State, under the last call for volunteers.

Dr. Geo. P. Sullivan, of Flemington, New Jersey, has been appointed Assistant Surgeon of the 15th Regiment New Jersey Volunteers.

In a recent engagement in North Carolina, Surgeon Woodhull, of the New Jersey 9th, had an almost miraculous escape. One bullet passed through his hat, grazing his head, another hit him in the side, another hit him on the forearm, and still another shot down his horse, hitting the animal but a few inches from the surgeon's body.

Dr. Joseph Gibbons, of Lancaster, having passed a satisfactory examination before the late Medical Board, has received a commission as assistant surgeon, and will leave shortly for the army.

Dr. G. Grant, Surgeon of Newark, N. J., of Gen. French's Brigade, has returned to his post, having entirely recovered from his late dangerous illness.

Medical Department, University of the Pacific.—The Fourth Annual Commencement of the Medical Department of the University of the Pa-

cific, at San Francisco, was held on the 13th of March. The degree of M.D. was conferred on five graduates. The daily attendance during the session was nearly twice as large as ever before.

The number of graduates of this school is as follows: First session, two; second, one; third, six; fourth, five; which shows a steady, healthy progress. We see no reason why, if properly managed, this school should not speedily become a successful medical school.

Answers to Correspondents.

Dr. F. F. S., Mass.—The price of Record on Venereal, with plates, is \$15. Send us the money, and we will forward the work by express.

Dr. A. L. C., Pa.—The Number for Dec. 7th, 1861, (Vol. 7, No. 10,) and the Index for the Seventh volume have been forwarded.

Dr. A. D. W., Ohio.—We furnish missing numbers to regular subscribers when we have them to spare, without additional expense.

DIED.

BAKER.—Suddenly, at Chatham, N. J., on Tuesday, Aug. 12 Harriet Peck, wife of Dr. Daniel Baker, in the 36th year of her age.

BYRNE.—In Brooklyn, on Friday, Aug. 15, Elizabeth Winifrede, infant daughter of Dr. John and Mary W. Byrne.

INGRAHAM.—Suddenly, on Saturday, Aug. 9, Abijah Ingraham, M.D., in the 56th year of his age.

Vital Statistics.

OF PHILADELPHIA, for the week ending Aug. 9, 1862.

Deaths—Males, 251; females, 195; boys, 147; girls, 123. Total, 456. Adults, 176; children, 270. Under two years of age, 211. Natives, 334; Foreign, 56. People of color, 35.

Among the causes of death, we notice—Apoplexy, 4; convulsions, 21; croup, 2; cholera infantum, 75; cholera morbus, 5; consumption, 31; diphtheria, 4; diarrhoea and dysentery, 33; dropsy of head, 10; debility, 34; scarlet fever, 5; typhus and typhoid fever, 21; inflammation of brain, 7; of bowels, 3; of lungs, 11; bronchitis, 0; congestion of brain, 10; of lungs, 4; erysipelas, 2; hooping-cough, 0; marasmus, 33; small-pox, 1.

For week ending Aug. 10, 1861.....421

" " Aug. 2, 1862.....370

Population of Philadelphia, by the census of 1860, 568,094.

Mortality, 1 in 1273.6

OF NEW YORK, for the week ending Aug. 4, 1862.

Deaths—Males, 223; females, 234; boys, 133; girls, 150. Total, 457. Adults, 165; children, 292. Under two years of age, 62. Natives, 327; Foreign, 130; Colored, 9.

Among the causes of death, we notice—Apoplexy, 9; infantile convulsions, 25; croup, 10; diphtheria, 14; scarlet fever, 9; typhus and typhoid fevers, 12; cholera infantum, 32; cholera morbus, 0; consumption, 52; small-pox, 2; dropsy of head, 16; infantile marasmus, 33; diarrhoea and dysentery, 14; inflammation of brain, 10; of bowels, 12; of lungs, 6; bronchitis, 7; congestion of brain, 8; of lungs, 6; erysipelas, 0; hooping-cough, 0; measles, 2; 273 deaths occurred from acute disease, and 32 from violent causes.

For week ending 1861.....000

" " Aug. 4, 1862.....457

Population of New York, by the census of 1860, 814,277

Mortality, 1 in 1781.8.

OF BOSTON, for the week ending Aug. 2, 1862.

Deaths—Males, 40; females, 54. Total, 94. Natives, 71; Foreign, 23.

Among the causes of death, we notice—Phthisis, 10; cholera infantum, 17; croup, 1; scarlet fever, 3; pneumonia, 1; variola, 0; dysentery, 5; typhus fever, 2; diphtheria, 1; hooping-cough, 0; convulsions, 2.

Population of Boston in 1860, 177,902. Average corrected to increased population, 110,70.

